DESCRIPTIONS OF NEW GENERA AND SPECIES OF AUSTRALIAN MOLLUSCA (CHIEFLY TASMANIAN).*

By PROFESSOR RALPH TATE and W. L. MAY.

[Read October 2, 1900.]

Lampusia nodocostata, spec. nov. Shell fusiform, rather slender, light-brown. Whorls (excl. proto-conch) four and a-half, convex, but obtusely angulated in the middle. Embryonic whorls incomplete, one and a-half preserved, smooth, rounded, relatively large (2.75 mm. diam.), suggestive of a styliform proto-conch similar to that of *L. exarata*, but on a larger scale.

Costæ subacute, with about three nodulations on the anterior half; six intervariceal costæ. Varices similar to the costæ, except that they are stouter; seven in all.

The spiral ornament consists of crowded threads, which are obscurely granulated; 24 on the penultimate whorl, of which three on the anterior half of the whorl are broader, and originate the nodulations on the costæ.

Last whorl about two-thirds the total length of the shell. The costæ are extended to the base, and the nodulation is continued below the periphery, corresponding with the intercrossing of six broader spiral threads, which are regularly disposed; the interstitial spaces between the broader threads are occupied by about eight smaller spiral threads.

Aperture quadrately oval ; beak short, considerably upturned. The columella is smooth, and the outer lip is not dentate (the shell is probably not full grown).

Length, 31; breadth, 16; length of aperture and canal, 17 mm. East Coast, Tasmania; two examples (W. L. May).

This species appears from the description and figures of Triton tenuiliratus, Lischke, Japan Meer-Conch., to be closely related thereto; but differs by details of ornament. T. granulatus, Dunker, is the only Australian species of the genus unknown to

* It is anticipated that figures of the new species and other unfigured Tasmanian species will be published early next year by the Linnean Society of New South Wales, to accompany a paper entitled "Revised Census of the Marine Mollusca of Tasmania," as time does not permit of their preparation to accompany this issue.

us, but as it is said to belong to Section Simpulum, whereas our species belongs to Gutturnium, the two must be regarded as distinct.

Cantharus kingicola, spec. nov.

Shell fusiformly oval, somewhat solid; colour opaque-white, except the summit, which is pale-orange.

Nucleus small, of two and a-half smooth, convex turns. Spire-whorls five, slopingly convex, subangulated towards the anterior by reason of the greater volume of the axial costæ. The axial ornamentation consists of close, elevated, rounded, straight costæ (twelve on the penultimate whorl), which thicken very rapidly as they approach the front suture (there they are about twice as wide as the interspaces). The spiral ornament consists of roundly compressed valid liræ (seven on the penultimate whorl) which cross the costæ, and of a sutural adpressed band. Body whorl convex, contracted anteriorly; there are twelve axial costa, which are most developed at the rounded periphery, and become evanescent in front of it; there are about 15 spiral liræ, fairly regular, with occasional interstitial threadlets, and there is a sutural band. Aperture elongately oval, half as long as the shell. Outer lip uniformly convex, varicosely dilated; acute, prominent lines within. Columella concavely arcuate, not plaited at the base. Beak short, rather wide, slightly upturned. Length, 18; width, 9 mm.

King Island; two specimens.

Marginella cratericula, spec. nov.

Roundly obconic, somewhat bullæform, having the general features, as regards shape of a *Bullinella*, translucent, shining, bluntly rounded posteriorly (where the shell is widest), rapidly attenuating to the subacute front. Spire concealed and sunken to form a shallow crateriform depression. Outer lip slightly thickened, smooth on the inner margin. Columella with two closely approximate large plaits; the anterior one the larger, terminating in a slight anterior emargination. Length, 2.3; width, 1.5 mm. D'Entrecasteaux Channel, Tasmania; 10 fathoms (*W. L. May*), two examples. This species is conspicuous by its impressed spire, which separates it from all other Marginellidæ.

Marginella multiplicata, spec. nov.

Shell minute, rather solid, shining white, having much the shape of M. Isseli. Spire concealed. Aperture equalling the total length of the shell, but not extending much beyond the

summit; slightly arched, narrow, of nearly equal width till it slightly widens at the everted front. Outer lip thickened and well-margined all round, smooth within. Columella with one strong oblique plait at the front, which is succeeded on the pillar by seven transverse thread-like plaits; the columella-plait runs out to form the left margin of a shallow and wide effuse notch. Length, 1.6: width, .95 mm. Tasmania; W. F. Petterd !.

This species much resembles M. Isseli, Nevill (M. nympha, Braz.), but it has more plications, and the outer lip is smooth; from M. cymbalum, which is a much larger shell, it is more narrowed anteriorly, and the plications of a different type. M. Hallii is truncated at the apex. M. alternans appears to resemble it, and though they have the same number of plications, yet their dispositions are so distinctly different that we must regard them, in the absence of actual comparisons, as distinct.

Marginella biplicata, spec. nov.

Shell small, cylindroid, pellucid, straw-coloured. Spire very obtuse, of three and a-half whorls, scarcely exserted. Aperture narrow elongate, widening to the front, obtuse-angled posteriorly. Outer lip scarcely thickened ; not ascending on the spire, its junction marked by a slight retiring angle ; smooth on the inner side. Columella with two strong oblique plaits at the front the posterior one is slightly the stronger ; anterior emargination well-defined.

Total length, 4; greatest width, 2 mm.

Port Esperance, Tasmania; in 24 fathoms, 2 exs. (W. L. May). It is nearest to M. stanislas, but is shorter and relatively broader, and the apex is more obtuse, whilst the most prominent differences are in the smooth inner lip and biplicated columella.

Marginella Simsoni, spec. nov.

M. denticulata (pars), Tate, non Conrad. M. minima, Petterd, non Sowerby.

Shell pyriform, contracted in front, shining, white. Spire immersed, though not wholly concealed. Aperture as long as the shell, slightly everted in the young. Outer lip thickened, smooth. Columella with about ten plications, decreasing gradually in size from the front.

Length, 1.9; greatest width, 1.3 mm. Tasmania and South Australia.

M. minima, Petterd, the type of which we have studied has a length of 1.4 and a breadth of 1.0 mm., and besides being smaller than *M. denticulata* it is slightly more attenuated to the front, and the outer lip is not thickened; differences which may be attributed to a young age.

The description of *M. denticulata*, Tate, is inapplicable, because it was based on two species—one specimen supplied the characters "denticulated margin and four-plicate columella" with exsert spire (it is a young micromorph of *M. Strangei*); the other, "pyriform shape and immersed spire," with a smooth outer lip and multiplicate columella, is *M. Simsoni*.

Marginella Mayii, Tate (spec. nov.).

Shell of an elongately oblong-oval shape; the body-whorl rather rapidly tapering from the rounded shoulder to the base; spire obtusely conical, blunt at the apex.

Test thick, smooth, polished. General colour chestnut-brown, relieved on the spire by lighter colour at the posterior sutures;

on the last whorl it is interrupted by a narrow light-coloured band at about the posterior one-third, and also at the base; the dark coloured bands are deeper tinted at their margins; the thickened aperture, all round, is opaque white.

Whorls five, nearly flat; the last convex posteriorly, and of an even slope thence to the snout.

Aperture three-fourths the total length of the shell, narrow, the outer lip making an acute angle posteriorly; about 2 mm. wide medially, narrowing thence to the front to about half. Outer lip thickly and broadly callously thickened on the outside, ascending to about one-half the height of the penultimate whorl; denticulated within (except towards the extremities). Columella stoutly four-plaited, plaits subequal, the posterior pair more transverse than the anterior pair.

Total length, 12; length of aperture, 9; maximum width, 6 mm. Frederick Henry Bay (type) and East Coast of Tasmania (W. L. May); Derwent Estuary (E. Harrison).

Among Australian congeners M. Mayii comes near to M. pygmæa, but is of very much larger size; it is, moreover, more attenuated anteriorly, and especially differs by its outer lip variced outside and denticulated within; also near M. Allporti, which it resembles in its denticulated outer lip and coloration, but differs by longer and attenuated spire and larger size.

I have much pleasure in adopting for this shell the name of my coadjutor, under which name it has been distributed [R. Tate].

Marginella ovulæformis, spec. nov.

Shell minute, ovate, attenuated at the ends, regularly convex, white, shining. Spire concealed, the aperture extending backward beyond it.

Aperture narrow, arcuate, bluntly rounded posteriorly, slightly expanding to the front, ending there in a slight emargination, which is curved to the left. Outer lip thin,

blunt-edged, edentulous. Columella with a strong terminal spiral plait running out to form the left margin of a deep and somewhat effuse canal.

Length, 1.5; greatest width, 1 mm. Tasmania (W. F. Petterd!).

This species and *M. lubrica* are characterised among recent Marginellidæ by their uniplicate columellas, but that type has an ancestral form in an Eocene species at Muddy Creek. In shape, *M. ovulæformis* is somewhat intermediate between *M. Flindersi*, with two plaits, and *M. Hallii*, with seven plaits; *M. Isseli* is also near, but it has four plaits, and is not so attenuated at the ends.

Donovania fenestrata, spec. nov.

Shell moderately stout, narrow lanceolar-fusiform, pale-fawn

colour. Pullus papillary of three, inflatedly convex smooth whorls, somewhat rapidly diminishing in size. Spire-whorls five and a-half, moderately convex, separated by a deeply impressed suture; ornamented with spiral and transverse ridges of equal strength, which produce square deep fenestrations; there are five spiral ridges, and on the penultimate whorl there are about twenty axial ones.

Last whorl convex, with seven spiral ridges to the periphery three on the concave area below it, and four on the snout.

Aperture roundly oblong, higher than wide; outer lip entire, vertical in contour, simple, ridged inside, corresponding with the external furrows. Columella arched to its base, thence running out abruptly and obliquely to form the left boundary of a short, wide, slightly up-turned snout.

Length, 8; width, 2.75; height of aperture, 2.75 mm. East Coast of Tasmania (*W. L. May*).

Natica Tenisoni, nom. mutand.

N. nana, Ten.-Woods, P.R.S., Tasm., 1876, p. 149, non Möller. Long Bay; Ten.-Woods.

Thylacodes caperatus, spec. nov.

Shells agglomerate, reddish brown; whorls embracing and reciprocally adherent, forming a short broad cone, ornamented with close-set, rounded, irregularly-sized, transverse ridges; suture distinct. The free tubular portion long, much narrowed, irregularly bent, circular in section; ornamented as the rest of the shell.

Diameter of base, 4 to 5; height of cone, about 2; length of tube, up to 10; its diameter, 1 mm.

Tamar Heads, Tasmania; W. F. Petterd !.

Animal unknown, but from its resemblance to some Tertiary species in Australia it is associated with *Thylacodes* rather than with *Vermetus*.

Turritella Atkinsoni, spec. nov.

This species was described as new by Tenison-Woods in 1877, under the name of T. Tasmanica, which makes double employment with Reeve's species; and in the following year it is quoted by him in his "Census" as T. Tasmaniensis (a typographical error). It would appear that he had subsequently admitted the need of a new specific denomination, and the shell has been locally known as T. Atkinsoni. Though its authorship is not traceable in print, we utilise it with ready willingness.

T. Woods's description is rather misleading, as it implies a bicarinated species, whereas there are four large keels on the penultimate whorl—the peripheral one is the largest, the posterior two smaller, and the anterior one is nearly as large as the peripheral one, with or without a slight band at one or both sutures. Its closest relative is *T. austrina*, Watson, of Kerguelen Island; but the Tasmanian shell has interstitial spiral striæ, and the sinus-lines are deeper and wider. Long Bay, *Ten.-Woods*; Port Esperance, *W. L. May. T. Godeffroyana*, Donald, Mal. Soc., IV., p. 53, t. 5, f. 6-6a, 1900, which is founded on a single specimen, may be an individual variation; it has *three* strong keels.

Sealaria (Aerilla) minutula, spec. nov.

Shell minute, moderately thick, cylindroid-turreted. Spirewhorls five, pale yellow-brown, flatly convex, and slightly angulated in the posterior-third, separated by a linear suture, bounded anteriorly by a spiral thread; ornamented by slender slightly oblique ribs, about 15 on the penultimate whorl, which are somewhat bent at the angulation, the interspaces are as wide, and smooth. The translucent-white apex consists of a convex, relatively wide, three- to four-carinated whorl, and of a small

hemispheric tip.

Last whorl flatly convex to the acute margin defining the base, base smooth.

Aperture oblong, somewhat effusively expanded at the front; peristome incomplete; outer lip thin, shortly insinuate at the suture; columella thin, nearly straight.

Length, 2; breadth, .57 mm.

Tasmania, W. L. Petterd !; W. Coast of S. Australia, R. Tate !; Victoria, J. H. Gatliff !

Eulima inflata, spec. nov.

Whorls slightly irregularly convex; penultimate whorl somewhat contracted; last whorl much inflated, regularly convex. Aperture relatively small, roundly oval, hardly oblique. Outer lip not retreating at the sutural margin. Length without apex, 6.25; width, 3 mm.

This species resembles *E. Tryoni*, but is thinner, and is a longer shell for the same number of whorls—the whorls are more convex; whilst *Tryoni* has a more oblique aperture, narrower base, which is oblique on the left side.

In the absence of the tip, it is uncertain to place the species in the Section Mucronalia, to some species of which it has some resemblance.

North Coast of Tasmania; W. F. Petterd!.

Eulima Mayii, Tate, spec. nov.

Shell solid, white, highly polished. Spire with a slight apical twist from before backward, gradually tapering to an extremely attenuated tip. Whorls fourteen, flat. Aperture elongate-oval, or a little higher than wide, slightly oblique; outer lip retreating from the middle line to the suture. Length, 7.75; width, 2.5; height of aperture, 2.25 mm. Seems to resemble *E. intermedia*, but has the last whorl approximately about half the length of the shell, instead of onethird, as in the Mediterranean species.

I employ the species-name in compliment to my coadjutor, under which it has been known in manuscript among Tasmanian collectors [R. Tate].

East Coast of Tasmania, south of Swansea; W. L. May.

Eulima Tryoni, spec. nov.

E. Tenisoni (pars), Tryon, Man. Conch., VIII., t. 68, f. 16, non p. 269; E. Tenisoni, Tate, T.R.S., S. Aust., XXII., 1898, p. 81.

This is the shell figured by Tryon as *E. Tenisoni*, but it is a different species to *E. micans*, T.-Woods, to which he applied that name. It is related to *E. latipes*, Watson, which has a broader base, patulous outer lip, and has a somewhat rapid increase of growth of the spire.

Common in S. Australia; also Victoria; and at Derwent Estuary, Tasmania, W. L. May.

Stylifer Petterdi, nom. mutand.

S. robusta, Petterd, Journ. Conch., 1884, p. 140, non Pease, 1860.

Leven Heads, Tasmania.

Syrnola Harrissoni, spec. nov.

Shell lanceolate, thin, hyaline, smooth, white. Apex heterostrophe, small, of one and a-half whorls. Spire whorls five, rapidly increasing in size, nearly flat, suture impressed (the specimens examined are more or less corroded, and present, in consequence thereof, a shoulder at the posterior suture).

Aperture elongate - oval, somewhat expanding anteriorly; columella with a very prominent spiral plait.

The shell is variable in its proportionate dimensions. The figured specimen has length, 3; width, 1; a large example has breadth, 1.5; length of aperture, 2; estimated length, 5.5 mm. Off Brown's River, Tasmania, E. Harrisson!.

Syrnola Petterdi, nom. mutand.

Obeliscus Tasmanicus, Petterd., Jour. Conch., 1884, p. 40; non S. Tasmanica, Ten.-Woods (Styloptygma), 1877. Tasmania.

Syrnola punctospira, spec. nov.

Shell minute, acuminately oval, rather thin, sub translucent. Spire whorls three and a-half, convex, of rather rapid increase, sculptured by forward-curved striæ and distant indistinct lineations; suture impressed. Pullus of one and a-half hyaline, exsert whorls continued into an erect loop with an immersed tip; its last whorl graduating in size to the first spire-whorl, somewhat inflatedly rounded and sculptured by ten spiral rows of punctures. Aperture elliptic-oval, front lip slightly effusively dilated on the left; columella with a large twisted plait. Length, 2·25; greatest width, 1·0 mm. George Bay, Tasmania, W. F. Petterd!. A minute shell, with well-rounded and rather rapidly-increasing whorls, with a distinctive sculptured pullus. Several examples.

Odontostomia deplexa, spec. nov.

Shell minute, imperforate, moderately stout, smooth, shining, white, sculptured with microscopic growth-lines (without spiral striæ). Whorls five, of moderate increase, convex, slightly protuberant at the posterior suture. Pullus concealed, except the papillary-like tip of the loop.

Aperture oval, columella with a strong transverse fold at its origin.

Length, 3; width, 1.1 mm.

Most like O. *lævis*, but the whorls are more convex, shell more cylindroid, besides being much smaller.

Frederick Henry Bay, Tasmania (W. L. May); S. Australia (R. Tate); Victoria (J. H. Gatliff!).

Odontostomia varians, spec nov.

Shell small, acuminately oval, moderately stout, dull white (dead). Pullus pellucid, smooth, papillary as a whole, forming a small lop-sided bend. Whorls five, flatly convex, separated by a broad deep suture; sculptured by four deep narrow spiral grooves, separating flat interspaces of dissimilar width (the first

three are relatively wide, the second and third of about the same width, but wider than one; the fourth is a slender lineation sunk in the sutural canal). The first and second ligatures are brokenup into blunt, straight, axial ridges, separated by about as wide indented interspaces.

Aperture oval, peristome thin. Columella slightly arched, forming a blunt roundly-effuse angle at the front; thinly and sparingly exsert to form an umbilical chink; there is a slender transverse plait at its summit.

Length, 3; width, 1.4 mm.

Of six examples two are in accord with the foregoing description. A third and fourth, which are translucent horn-colored, have the first and second ligatures studded with small granules; whilst the fifth and sixth, also translucent, are without ornament, and the spiral furrows are feebly developed and barely traceable on the body-whorl.

D'Entrecasteaux Channel, Tasmania (W. L. May).

Genus Pseudorissoina, Tate and May.

Type :— P. Tasmanica, Tenison-Woods (Stylifer). Apex sinistral, spire and aperture like Rissoina (e.g., R. nivea). The unique species was originally described as belonging to Stylifer; Tryon, who figures an authentic specimen, says of it— "Is it not rather an Eulima?" Our study of the species confirms Ten.-Woods' statement that the apex is sinistral—indeed, whilst having the spire and aperture of a Rissoina, like R. nivea (the shell is, however, smooth), it has the heterostrophe loop-like nucleus of Eulimella. Such a combination of characters seem to be unprovided for in the families Pyramidellidæ or Rissoidæ, hence the new generic designation. Briefly, this new genus is a Pyramillid with a Rissoina aperture or a Rissoinid with a Pyramillid nucleus. The higher value of the nuclear character in classification induces us to place it, in Pyramidellidæ, near Eulimella.

Turbonilla admiranda, nom. mutand.

Elusa bifasciata, Ten.-Woods, P.R.S. Tasm., 1877, p. 150; non Turbonilla bifasciata, A. Adams, 1861. T. festiva, Angas, P.Z.S., 1877, t. 5, f. 4; non Folin, 1867. Victoria, Tasmania, and N.S. Wales.

Rissoia (Apicularia) demessa, spec. nov.

Shell minute, strong, pale-brown. Spire-whorls four, convex, ornamented with narrow rounded oblique ribs (about fourteen on the penultimate), more prominent medially, and attenuated at the sutures; also with spiral grooves, which are about as wide as the intervening flat threads (about eight on the penultimate); on

the last whorl the slender costæ stop short at the periphery. Pullus of smooth whorls.

This species is closely related to *R. trajectus*, Watson, but differs by more elongate shape, arched ribs, and rounded whorls; also to *R. Strangei*, Braz., which has closer and stronger ribs, fewer spiral striæ, and the shell short and stout.

Tasmania.

Rissoia (Apicularia) apicilirata, spec. nov.

Elongate-conic, thin, yellow-fawn, smooth, shining. Pullus hyaline, turbinate, two-whorled, ornamented with three, spiral, simple, relatively broad and high keels. Whorls three, slightly bicarinated, the posterior slope somewhat concave, the anterior slope steeper and shorter; ornamented by transverse slender ridges (about twenty on the penultimate), which are oblique on the posterior slope, vertical thence to the front suture; there is a spiral thread at the posterior suture, and a threadlet near the anterior rows; two spiral rows of small nodosities occupy the near middle-third of the whorl.

Periphery of last whorl with four riblets crossed by costulæ, and there are a few others on the base which gradually decrease in size.

Aperture oval; peristome entire, thin. Length, 2.2; width, 9 mm. D'Entrecasteaux Channel, Tasmania. This species is unique in the section by reason of its ornate pullus.

Rissoia (Pusillina) discrepans, spec. nov.

Shell oval-conic, thin, greyish, pale rose-tinted at the apex. Pullus somewhat hemispheric of two smooth whorls. Spirewhorls four, nearly flat, suture impressed; ornamented by numerous slender subacute axial ridges, interstices smooth. Last whorl subangulated, the axial costation evanescent towards the anterior part; an indistinct lineation is at the periphery, as also one above and one below, all in near contiguity; base finely striated radially. Aperture oval, outer and inner lips thinly callously joined; outer lip thin (slightly varicosely dilated behind, front lip with a slight insinuosity—these features are probably the result of an injury during life). Columella slightly exsert, margining a linear umbilical chink.

Length, 3; width, 1.6 mm.

D'Entrecasteaux Channel, Tasmania.

The ornament and shape, in combination with the angulated base, distinguish this species from all figured species.

Rissoia (Amphithalamus) Simsoni, spec. nov.

Pupiform, strong, shining, white, tinted with pale-chestnut. Whorls four, flatly convex, sculptured with microscopic oblique striæ; suture linear. Apex hemisphæric of one and a-half whorls. Last whorl somewhat flattened on the ventral face. Aperture oval; peristome continuous, adnate to the parietal wall. Resembles R. dissimilis on a large scale.

Length, 4.5; width, 1.5 mm.

Species-name in compliment to our friend and co-worker, Mr. Auguste Simson of Launceston.

Derwent Estuary, Tasmania (W. L. May); also Port Fairy, Victoria (Rev. T. Whan !).

Rissoia (Cingula) rubicunda, spec. nov.

Shell minute, elevated conic, imperforate, moderately thick; varies in colour from pellucid-brown to opaque-white.

Pullus obtuse, of one and a-half turns. Spire-whorls four, moderately convex, widest near the anterior suture (some examples show a tendency to imbrication), smooth, and sculptured with growth-lines. Suture linear, distinct. Last whorl rather depressed at the suture, rounded at the periphery, a little contracted at the outer lip.

Aperture rotund, chestnut-coloured in the interior; peristome entire; outer lip thin; columella lip slightly exsert, margining a false umbilical chink.

Length, 2.5; width, 1.0 mm.

Derwent Estuary, Tasmania (W. L. May); many examples.

This may prove to belong to Hydrobia, when the animal has been studied.

R. perexigua, nom mutand.

Rissoia minutissima, Ten.-Woods, P.R.S. Tasm., 1878, p. 122 non Rissoia minutissima, Michelin, "Gen. Rissoia."

Rissoia (Nodulus) pellucida, spec. nov.

Shell minute, obliquely oval, somewhat stout, translucent-white, smooth, shining, imperforate. Pullus small, obtuse. Spirewhorls three and a-half, rapidly increasing, slantingly convex, without visible ornament or sculpture. Aperture roundly oval; peristome thick, continuous.

Length, 1.2; width, .75 mm.

Frederick Henry Bay, Tasmania (W. L. May).

This species differs from other members of the section by its Littorina-like shape; however, the following species in Section Cingulina offer some comparisons :--- It has the outline of R. hyalina, which possesses spiral raised striæ and delicate growth-lines, and it is more obliquely oval than R. littorinæformis.

Rissopsis buliminoides, spec. nov.

Shell small, cylindroid, thin, opaque-white. Whorls six, flatly convex, sculptured with faint axial striæ of growth; suture linear, but well-defined. Pullus hyaline, depressedly rounded, forming a small abrupt papillary summit, tip immersed. Aperture oval; peristome entire, the callous growth on the parietal wall somewhat explanulate; columella with a slight torsion over a minute umbilical chink.

Length, 4.25; breadth, 1.3 mm. Federick Henry Bay, Tasmania, 10 fathoms, W. L. May.

Rissopsis consobrina, spec. nov.

Elongate, turreted, hyaline (in a fresh state), with rounded whorls and a deep suture, sculptured with curved growth-lines. Aperture elongate-oval, somewhat explanulate, columella-lip very thin and exsert.

Its turreted form, rounded whorls, and elongate oval aperture distinguish it from *R. buliminoides*.

Length, 3.5; width, 1.0 mm.

Federick Henry Bay, Tasmania, common, W. L. May.

Cyclostrema porcellana, spec. nov.

Shell oval-conic, moderately stout, smooth, shining, opaquewhite. Spire-whorls three and a-half, convex, sloping gently from the posterior one-third, more abruptly to the anterior suture, faintly marked by oblique striæ. Pullus of one and a-half whorls, translucent, depressedly convex. Periphery of last whorl roundly angulated. Aperture roundedly-oval, oblique; peristome incomplete; outer lip rather thin; columella slightly exsert, but not reflected over a minute umbilicus. Six examples. Length, 1.8; breadth, 1.3 mm. This species is more conic than such related forms of Tubiola as C. australe, C. contabulatum, and C. micron. Frederick Henry Bay, Tasmania (W. L. May).

Zidora Lodderæ, nom. mutand.

Z. Tasmanica, Hedley, P.L.S., N.S. Wales, 1900, p. 93, three woodcuts; non Beddome, 1883.

This species is closely related to the Japanese Z. reticulata; and judging from Reeve's figure of that shell, the Tasmanian congener differs by relatively greater width.

The shell which Tate rightly attributed to Beddome's species, and described under the name of Z. Legrandi, T.R.S., S. Aust., XVIII., p. 118, 1894, differs from other known species by its apex situated far within the vertical plane of the posterior margin.

Tasmania (Miss Lodder); N.S. Wales (apud Hedley).

Nacella Tasmanica, nom. mutand. N. parva, var. Tasmanica, Pilsbry, "Nautilus," 1895. Frederick Henry Bay, Tasmania (W. L. May).

Cadulus (Gadilia) spretus, spec. nov.

Shell small, of medium proportion, well-curved, variegated (in some specimens) with translucent and opaque-white rings and encircling bands. Surface smooth, with fine obliquely annular grooves or lines, without traces of vertical striæ.

Apertures circular, transverse. Tube suddenly contracted quite near the oral aperture, but exhibits a slight dilatation at the end.

Shell most like C. panamensis, Sharp and Pilsbry, but seems to grow more rapidly, has greater breadth throughout, and is more curved.

Length of shell, 5.5; diameter of larger aperture, .7; of the smaller aperture, .3 mm.

Port Esperance, Tasmania, in 24 fathoms (W. L. May).

Cyamium mactroides, spec. nov.

Shell mactra-like, minute, equivalve, nearly equilateral, somewhat thick, smooth, and shining; of a whitish colour, and partially brown-tinted, moderately convex. Surface concentrically striated, obsoletely radially ridged, ventral and anterior margins crenulated within. Umbos small, approximate, slightly directed forwards, a little posterior. Dorsal line about equally inclined, the anterior margin curved, the posterior margin truncatedly rounded, ventral margin nearly straight.

Hinge-line arched and relatively deep. Left valve with a posterior marginal ligamental pit, in front of which is a central cardinal tooth with two strong equal divaricating branches, and an anterior oblique cardinal tooth. Right valve with two diverging cardinal teeth, the anterior one bifid at the tip.

Antero-posterior diameter, 2.05; umbo-ventral diameter, 1.8 mm. Two pairs of valves, taken in life (W. F. Petterd!).

The reference of this little shell to *Cyamium* is because its dentition agrees with the emended description of the genus as implied by Bernard in Bull. Mus. Hist. Nat., 1897, p. 311.

Carditella delta, spec. nov.

Shell equilateral, subequivalve, trigonal, compressed with produced straight pointed umbones. The dorsal lines slope very rapidly from the umbones which are in contact; the post-dorsal margin slightly arched, the anterior-dorsal straight; the lunule and escutcheon occupy deep elliptical depressions, angulated on the margin. The ventral margin is arched, and is distantly crenulated within.

There is a thin brown epidermis; the ornament consists of concentric lines and a few distant growth-folds and obscure radial lines.

Umbo-ventral diam., 2.25; antero-posterior diam., 2; sectional diam., 1.25 mm.

Derwent Estuary, Tasmania (W. L. May).

Comes nearest to C. polita, Tate, an Eocene species, but is not produced anteriorly. It differs from C. Atkinsoni by its acutely trigonal outline, and is not so convex.

Carditella pectinata, spec. nov.

Triangularly oval, inequilateral, rather convex. Anterodorsal margin straight and steeply inclined; post-dorsal margin convexly sloping to the narrow rounded posterior side; ventral margin slightly curved, distantly crenulated within.

Umbones obtuse, prominent, approximate, situated considerably in front of the centre.

Colour yellowish-brown. The ornament consists of numerous (fifteen or more) radial broad ridges (most conspicuous anteriorly), separated by linear sulci; and intersected by growth-lines.

Umbo-ventral diam., 1.5; antero-posterior diam., 1.5; sectional diam., 1 mm.

Derwent Estuary, Tasmania (W. L. May).

Genus Thraciopsis, nom. mutand.

Alicia, Angas, 1867, non Johnson, 1861. Type :— T. angustata, Angas (sp.) New South Wales, Tasmania, and South Australia.

